

ABSTRACT OF THE DISCLOSURE

The present invention provides an improved acyclic anionic six-electron-donor ancillary ligand suitable for being bonded in a transition metal complex. The present invention also provides a transition metal complex that includes at least one acyclic anionic six-electron-donor ancillary ligand which is suitable for use as an olefin polymerization catalyst. The complex includes a Group 3 to 10 transition or lanthanide metal and one or more anionic or neutral ligands in an amount that satisfies the valency of the metal such that the complex has a net zero charge. The present invention also discloses a method for making transition metal complex and a method for using the complex for olefin polymerization.